CLAIMS

I claim:

1. A stabilized ladder system for comprising:

a ladder assembly comprising a pair of rails and a plurality of rungs extending between the rails, each of the rails having an upper end and a lower end, each of the rails having a lower cavity extending into the lower end of the rail, each of the rungs having opposite ends and at least one of the rungs having an end cavity extending into each of the opposite ends of the rung through the rails;

a ladder leveling assembly comprising a lower extension arm mounted on each of the rails of the ladder assembly, each of the lower extension arms being extendable from the lower end of one of the rails, each of the lower extension arms having an upper end slidably inserted into the lower cavity of the rail, each of the lower extension arms mounted thereon being extendable from the rail for engaging the ground surface; and

a lower stabilizer assembly for stabilizing a lower portion of the ladder assembly with respect to a ground surface, the lower stabilizer assembly comprising a pair of outboard foot assemblies with a position of each of the outboard foot assemblies being laterally adjustable with respect to the rails of the ladder assembly such that a lateral spacing of the pair of outboard foot assemblies is adjustable.

2. The system of claim wherein each of the outboard foot assemblies comprises:

a lower outboard rail extending substantially parallel to the rails of the ladder assembly, the lower outboard rail having a lower end, a lower end cavity extending into the lower end of the lower outboard rail;

an upper lateral brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the upper lateral brace arm being mounted on the upper outboard rail, the inner end of the upper lateral brace arm being slidably received in the rung for adjusting a lateral spacing between the upper outboard rail and one of the rails of the ladder assembly;

a lower lateral brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the lower lateral brace arm being mounted on the lower outboard rail, the inner end of the lower lateral brace arm being slidably received in the rung for adjusting a lateral spacing between the lower outboard rail and one of the rails of the ladder assembly;

securing means for releasably securing the position of at least one of the lateral braces with respect to a respective one of the rungs of the ladder assembly; and

an outboard extension leg having an upper end slidably inserted into the lower end cavity of the lower outboard rail, the outboard extension leg being extendable from the lower outboard rail for engaging the ground surface.

3. The system of claim 1 additionally comprising a ladder extending assembly comprising an upper extension arm mounted on each of the rails of the ladder assembly, each of the upper extension arms being extendable from the upper end of one of the rails, each of the upper extension arms having a lower end slidably inserted into the end cavity of the rail, each of the upper extension arms being extendable from the rail for engaging a structure.

4. The system of claim 1 wherein each of the rails has an upper cavity extending into the upper end of the rail, and additionally comprising an upper stabilizer assembly for stabilizing an upper portion of the ladder assembly with respect to a structure, the upper stabilizer assembly comprising a pair of outboard support assemblies with a position of each of the outboard support assemblies being laterally adjustable with respect to the rails of the ladder assembly such that a lateral spacing of the pair of outboard support assemblies is adjustable.

5. The system of claim 4 wherein each of the outboard support assemblies comprises:

an upper outboard rail extending substantially parallel to the rails of the ladder assembly, the upper outboard rail having an upper end, an upper end cavity extending into the upper end of the upper outboard rail;

a lateral brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the lateral brace arm being mounted on the outboard rail, the inner end of the lateral brace arm being slidably received in the rung for adjusting a lateral spacing between the upper outboard rail and one of the rails of the ladder assembly;

securing means for releasably securing the position of the lateral brace with respect to a respective one of the rungs of the ladder assembly;

an outboard extension arm having a lower end slidably inserted into the upper end cavity of the upper outboard rail, an upper end of the outboard extension arm having a contact member mounted thereon, the outboard extension arm and the contact

member being extendable from the upper outboard rail for engaging the structure.

6. The system of claim 1 additionally comprising a medial stabilizer assembly for stabilizing a middle portion of the ladder assembly with respect to a ground surface, the medial stabilizer assembly comprising a pair of outboard steadying assemblies with a position of each of the outboard steadying assemblies being laterally adjustable with respect to the rails of the ladder assembly such that a lateral spacing of the pair of outboard steadying assemblies is adjustable.

7. The system of claim 6 wherein each of the outboard steadying assemblies comprises:

a medial outboard rail extendable substantially parallel to the rails of the ladder assembly, the medial outboard rail having a lower end, a lower end cavity extending into the lower end of the medial outboard rail;

a medial brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the medial brace arm being mounted on the outboard rail, the inner end of the medial brace arm being slidably received in the rung for adjusting a lateral spacing between the medial outboard rail and one of the rails of the ladder assembly;

securing means for releasably securing the position of the medial brace with respect to a respective one of the rungs of the ladder assembly;

an outboard steadying arm having an upper end slidably inserted into the lower end cavity of the medial outboard rail, the outboard steadying arm being extendable from the medial outboard rail for engaging the ground surface.

8. The system of claim 1 wherein the ladder assembly comprises a scaffold structure with a pair of scaffold supports, each of the scaffold supports having the pair of rails and the plurality of rungs, the scaffold structure also including a platform for extending between the scaffold supports.

9. The system of claim 1 wherein the ladder assembly comprises a plurality of ladder sections each having the pair of rails and the plurality of rungs, each of the plurality of ladder sections being pivotally mounted to at least one other ladder section.

10. The system of claim 9 wherein the plurality of ladder sections includes at least five ladder sections pivotally connected together to form a chain of ladder sections, the plurality of ladder sections having a first position in which the ladders sections form a step ladder configuration and a second position in which the ladder sections form a bridging ladder configuration.

12. The system of claim 1 wherein each of the outboard foot assemblies comprises:

a lower outboard rail extending substantially parallel to the rails of the ladder assembly, the lower outboard rail having a lower end, a lower end cavity extending into the lower end of the lower outboard rail;

an upper lateral brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the upper lateral brace arm being mounted on the upper outboard rail, the inner end of the upper lateral brace arm being slidably received in the rung for

adjusting a lateral spacing between the upper outboard rail and one of the rails of the ladder assembly;

a lower lateral brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the lower lateral brace arm being mounted on the lower outboard rail, the inner end of the lower lateral brace arm being slidably received in the rung for adjusting a lateral spacing between the lower outboard rail and one of the rails of the ladder assembly;

securing means for releasably securing the position of at least one of the lateral braces with respect to a respective one of the rungs of the ladder assembly; and

an outboard extension leg having an upper end slidably inserted into the lower end cavity of the lower outboard rail, the outboard extension leg being extendable from the lower outboard rail for engaging the ground surface.

a ladder extending assembly comprising an upper extension arm mounted on each of the rails of the ladder assembly, each of the upper extension arms being extendable from the upper end of one of the rails, each of the upper extension arms having a lower end slidably inserted into the end cavity of the rail, each of the upper extension arms being extendable from the rail for engaging a structure;

wherein each of the rails has an upper cavity extending into the upper end of the rail, and additionally comprising an upper stabilizer assembly for stabilizing an upper portion of the ladder assembly with respect to a structure, the upper stabilizer assembly comprising a pair of outboard support assemblies with a position of each of the outboard support assemblies being laterally adjustable with respect to the rails of the ladder assembly such that a lateral

spacing of the pair of outboard support assemblies is adjustable, wherein each of the outboard support assemblies comprises:

an upper outboard rail extending substantially parallel to the rails of the ladder assembly, the upper outboard rail having an upper end, an upper end cavity extending into the upper end of the upper outboard rail;

a lateral brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the lateral brace arm being mounted on the outboard rail, the inner end of the lateral brace arm being slidably received in the rung for adjusting a lateral spacing between the upper outboard rail and one of the rails of the ladder assembly;

securing means for releasably securing the position of the lateral brace with respect to a respective one of the rungs of the ladder assembly;

an outboard extension arm having a lower end slidably inserted into the upper end cavity of the upper outboard rail, an upper end of the outboard extension arm having a contact member mounted thereon, the outboard extension arm and the contact member being extendable from the upper outboard rail for engaging the structure; and

a medial stabilizer assembly for stabilizing a middle portion of the ladder assembly with respect to a ground surface, the medial stabilizer assembly comprising a pair of outboard steadying assemblies with a position of each of the outboard steadying assemblies being laterally adjustable with respect to the rails of the ladder assembly such that a lateral spacing of the pair of outboard steadying assemblies is adjustable, wherein each of the outboard steadying assemblies comprises:

a medial outboard rail extendable substantially parallel to the rails of the ladder assembly, the medial outboard rail having a lower end, a lower end cavity extending into the lower end of the medial outboard rail;

a medial brace arm having an inner end extending into one of the ends of the rungs of the ladder assembly, an outer end of the medial brace arm being mounted on the outboard rail, the inner end of the medial brace arm being slidably received in the rung for adjusting a lateral spacing between the medial outboard rail and one of the rails of the ladder assembly;

securing means for releasably securing the position of the medial brace with respect to a respective one of the rungs of the ladder assembly;

an outboard steadying arm having an upper end slidably inserted into the lower end cavity of the medial outboard rail, the outboard steadying arm being extendable from the medial outboard rail for engaging the ground surface.